Title (en)

METHOD FOR STRUCTURING A SUBSTRATE SURFACE

Title (de)

VERFAHREN ZUR STRUKTURIERUNG EINER SUBSTRATOBERFLÄCHE

Title (fr)

PROCÉDÉ POUR FORMER DES MOTIFS SUR UNE SURFACE DE SUBSTRAT

Publication

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Application

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Abstract (en)

[origin: WO2019007449A1] The invention relates to a method for generating a structured surface on a substrate, in which surface structures with dimensions in the sub-micrometre range are generated by means of treatment with an intensive pulsed laser beam, wherein by varying the method parameters of focus diameter, peak pulse power, pulse energy, point spacing, pulse length, pulse spacing and/or pulse sequence, a multiscale surface structure in the sub-micrometre and micrometre range is generated by means of, in part, material-removing treatment. The method makes it possible to adapt the microstructure to be generated to the substrate surface properties, which are intrinsically inhomogeneous in the sub-millimetre range, and to vary the method parameters accordingly. In an advantageous embodiment, the method parameters to be set locally are selected at a point in time very close to machining by means of a parallel evaluation of sensor data of the substrate surface.

IPC 8 full level

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